"FUTURES" IN THE WHEAT MARKET.

TRADING in contracts for the future delivery of wheat has grown to large proportions in the United States of late years. And, when attempts were made during the past summer to corner the wheat market at Chicago and at San Francisco, the enormous amount of capital so employed, and the predominance of speculative activity at those cities, naturally drew unusual attention to what has been described as gambling in our chief food staple. Leading newspapers throughout the country roundly denounced the speculators for the derangement of trade and the abnormal prices resulting from attempted corners, and, as so often in the past, called in question the legality as well as the morals of what is known as "the future contract."

In June, the New York *Tribune* concluded a discussion of the effects of speculation, by saying that "in time a wiser public opinion will prevail here, holding speculation in food products hostile to public welfare and the gambler in grain an enemy of the American producer." Even more direct were the allegations of the Buffalo *Commercial Advertiser* in August, when it declared that "certain little speculative games, much in vogue in American commercial centres, . . . have made the exchanges of our large cities huge gambling clubs," and added that "among those demoralizing customs is the practice of dealing in 'futures,' 'options,' buying and selling on margins without transfer of merchandise." These are but samples of the language used by leading daily newspapers throughout the country during the past summer. In the United Kingdom, similar comment is not wanting. The *St. James Gazette*, of London, asks, "At what point does legitimate trading suddenly become transformed into mad

speculation, involving the public in the greatest inconvenience and entailing loss or ruin upon thousands of innocent people?" The *Mark Lane Express*, whose antipathy to dealings in futures is well known, volunteers the information that "these contracts (futures) are framed to allow of differences in value at a certain date or within a certain time being paid or received, the commodity itself never being intended to pass from the one party to the other. The seller does not possess it. The buyer does not intend to receive it."

The indictment contained in these extracts, if it can be sustained, is certainly broad enough. It not only comes from hundreds of writers for the newspapers, but crystallizes the belief of thousands of intelligent people,— merchants, farmers, manufacturers, and legislators. Such an outcry should not be ignored. When public opinion, as mirrored by the press, strongly condemns the methods of those who collect and distribute our harvests at home and abroad, it is time that an examination should be made as to the facts.

The future contract is the agreement, often erroneously called an "option," by which the seller binds himself to deliver a certain quantity of wheat at a specified price at a date named. The form for these contracts, in use at the New York Produce Exchange, is as follows: —

GRAIN CONTRACT. ("FUTURE.")

NEW YORK, ... 18........

In consideration of One Dollar in hand paid, the receipt of which is hereby acknowledged, ... have this day sold to (or bought from) .... bushels of ...., New York inspection, at .... cents per bushel, ... deliverable at seller's (or buyer's) option, ... 18........

Signed, ...

This contract is made in view of, and in all respects subject to, the By-laws and Rules established by the New York Produce Exchange.

If the contract be for 8,000 bushels of No. 2 red winter wheat, September delivery, the "option" consists in its resting with the buyer or the seller (whichever the contract specifies) to say on what day in that month the delivery shall be made.

Let us suppose that a general storekeeper or a local grain buyer has received at Parsons, Kansas, in odd lots, or has been through the country and bought, some 16,000 bushels of wheat, and has had it delivered at the elevator alongside the railway. The farmers in Labette and surrounding counties in Kansas presumably take the Parsons *Sun*, and, in addition to keeping themselves informed as to the price of wheat at Chicago and New York daily, are familiar with the market price of wheat at Parsons. The latter depends primarily on quotations at St. Louis, and indirectly on those from New York, winter wheat markets; for winter wheat is raised in Kansas. The Parsons price is nominally the St. Louis price less the cost of transportation thither. The local shipper believes that his 16,000 bushels will grade No. 2, New York inspection, and has paid, on an average, about 54 cents per bushel for it. We will further suppose the cost of shipment to New York to be 25 cents per bushel. It is August. The late "iniquitous speculation and attempted corner at Chicago have killed trading in wheat," and the price at New York has fallen to 80 cents, with the market likely to drag for some time; but telegraphic report reveals a more active market at New York, with an advance of 1½ cents. Thereupon, this speculative wheat buyer wires a New York grain commission house to sell for his account, September delivery, 16,000 bushels of wheat, and proceeds to load his grain into cars and send it to New York to meet his contract. The New York merchant goes upon the floor of the Produce Exchange, and sells (by contract), for September delivery, 16,000 bushels of wheat, which particular grain is at that mo-

ment in a little elevator out in Kansas. The purchaser of this wheat represents an English house, which imports wheat to sell to millers in the United Kingdom. The Parsons merchant sold when he did on a "bulge," believing that the general outlook for the next six weeks favored a low and dull market, and wishing to get the benefit of the temporary advance. The exporter bought when he did on a direct order from the firm abroad. But, within two hours or twenty-four hours, the exporter, finding ocean freights tending downward, seeing also a prospective decline in prices, and believing that he will be able to make better arrangements for export at a later day and still meet the wants of his principals, sells 16,000 bushels of wheat — this particular 16,000 being in mind — to a New York miller, who, for reasons of his own, wants it. A day later,— or, perhaps, on the same day,— the miller, finding a fractional advance in prices and aiming at a subsequent purchase to supply his mill, in turn sells 16,000 bushels of wheat for September delivery. It is purchased by a member of the Produce Exchange, because he "thinks it cheap" or for "purely speculative reasons," who disposes of it, either at a small loss or profit, to another "scalper," and so on, until sales have been made perhaps twenty times.

This brings us to a consideration of the means by which future contracts are closed out in actual practice. All future contracts (New York and Chicago) contemplate the actual delivery of the grain, and they may be closed out only in one of three ways: —

First.— By the actual delivery of the grain, which may be by elevator or warehouse receipts or by the moving of the grain alongside, if from commission merchant to exporter. Under this head, too, comes the system of delivery on what are termed "transferable orders." The contracts on the New York Produce Exchange read, we will say, "sellers' option," which refers to the day on

which the grain shall be delivered. In the case of repeated sales of 16,000 bushels of September wheat given above, suppose the actual wheat arrived at New York September 10, and that the final buyer in the list of, say, twenty who had been trading in it, an exporter, having freight room engaged, wants just 16,000 bushels to make a cargo. By means of a transferable order, the merchant who first sold the 16,000 bushels, September delivery, and to whom the wheat was consigned, delivers the wheat to the twentieth man in line, each of the intermediate traders signing it and passing it along in succession. In this way, all the "trades" between the original seller and the last in line are wiped out by each of the pairs of buyers and sellers paying one another "differences," as compared with the "settlement price" established each day.

Second.— By indirect settlement, which may be described as delivery by clearing the contracts. We may suppose that the New York merchant who first sold the 16,000 bushels of wheat received, soon after, a cable order to buy 16,000 bushels of September wheat. He encounters the man to whom he had previously sold that quantity (contract not yet expired), and buys 16,000 bushels of wheat, September delivery. When the wheat arrives at New York, the two transactions referred to may be settled by cancellation. A sold to B, and B to A, both for September delivery. In theory, A would have to deliver the wheat to B, and receive a check, whereupon B would deliver the identical wheat back to A, and receive A's check; but this uncalled for friction is avoided by the simple process which suggests itself to men everywhere and in all lines of business.

Third.— By indirect settlement, technically called "ringing." The word suggests "rings" and "corners," but its application in this instance is entirely devoid of offence. This process may be best explained by further reference to the supposititious sales of 16,000 bushels of

Kansas wheat, where A sold, September delivery, to an exporter, he to a miller, the miller to a speculator, the latter to another, and so on until there were, say, twenty firms or individuals in line. Now let it happen that A receives an order to buy September wheat, and in doing so gets it from the twentieth man in the line just described. By this act, the like of which may and does frequently happen, a "ring" is created. And, if all parties in interest so elect (it being optional with each of them whether to ring out or not), all the contracts may be settled by the payments of differences, based on the settlement price, as described in the case of transferable orders. And this appears to be an actual delivery, too. A sold actual wheat, and was bound and intended to deliver it. Upon his ability to keep his contract, nineteen other trades depended. The last buyer, in the course of business, became a seller to the first. Would it make the method of settlement any more legitimate if A actually turned over his wheat to B, and B passed it on to C, and this was kept up until the twentieth buyer received it, and handed it over to A again?

Those who merely desire to indulge gambling proclivities by speculating in grain may as well stick to the bucket shops. It is true that such an one may buy and sell at the Produce Exchange, and collect his profits or contribute his losses through a commission house or brokerage concern; but let us note where he would land, if he, as principal, proposes to "scalp for eighths." Suppose A to be a member of the New York Produce Exchange, who regards future trading as "bets on the market price,"— a mere collection or payment of differences, with no grain to be delivered or received. He buys 8,000 bushels of December No. 2 red wheat, say at 83½ cents, and within an hour sells it at 84 cents, making an apparent profit of ½ cent per bushel, or $40. Following his steps, under the rules of the Exchange, it is found that he first

buys at 83½ cents from B & Co., who are selling for London account, to protect purchases of California wheat in transit. Under the rule, B & Co. call the buyer 10 cents per bushel,* original margin, or $800, to be deposited to protect the contract. Second, A sells at 84 cents to C & Co., capitalists, who, on the basis of the purchase of December at 84 cents, sell January at 85⅜ cents, so as to secure carrying charges of 1⅜ cents for the month. C & Co. also call $800 (or $400), original margin; and such margins must be put up within one hour from the time when called. A now has two open contracts for December, a purchase from B & Co. and a sale to C & Co., and has up $1,600 (or $800), original margin, on which he receives interest at the rate of 2½ per cent. per annum, although the money is worth to him 6 per cent. He is therefore losing 3½ per cent. interest on the amount of his margins until the contracts are liquidated. A is also obliged to put up additional margins, in case the price advances or declines while the contracts are open. If the price advances 5 cents, he has to put up $400 additional margin with C & Co. If it declines 5 cents per bushel, he has to put up a like sum to protect B & Co. If B & Co. make no trades meanwhile that will "ring out" with C & Co., and so let A out, this money is kept up as margin until December 1, when B & Co. deliver to A a load of wheat at 83½ cents, and A at once delivers it to C & Co. at 84 cents, adjusting the contract to the settlement price, which may be higher or lower. A then realizes his $40 profit, less loss of interest on his margins, and discovers that he actually bought and sold wheat, and did not merely bet on the market.

It should be added, particularly for the benefit of those who regard "futures" as excuses to bet on prices of grain, with no expectation on the part of buyer or seller to

* Or they may call 5 cents, if the buyer be in good credit, or $400.

make a delivery, that, if the grain due on such a contract be not tendered (sellers' option) before 1.30 P.M. of the last business day of the month, the purchaser notifies the committee on grain to buy it in for his account at public "call," which is done. The grain so bought in is then a good delivery on maturing contracts that day.

The validity of contracts for future delivery, of which the above is an example, has been the subject of conflicting decisions in the State courts; but in the Supreme Court of the United States, in the case of *Irwin* v. *Williar*, decided early in 1884, the American law was authoritatively stated by Mr. Justice Matthews, as follows: —

> The generally accepted doctrine in this country is, as stated by Mr. Benjamin, that a contract for the sale of goods to be delivered at a future day is valid, even though the seller has not the goods nor any other means of getting them than to go into the market and buy them; but such a contract is only valid when the parties really intend and agree that the goods are to be delivered by the seller and the price to be paid by the buyer. And if, under guise of such a contract, the real intent be merely to speculate in the rise or fall of prices, and the goods are not to be delivered, but one party is to pay the other the difference between the contract price and the market price of the goods at the date fixed for executing the contract, then the whole transaction constitutes nothing more than a wager, and is null and void. And this is now the law in England, by force of the statute of 8 & 9 Vict. c. 109, s. 18, altering the common law in that respect. Benjamin on Sales, §§ 541, 542, and notes to fourth Am. edition by Bennett.*

* 110 U. S. 499. The American cases are collected by Benjamin, in the place cited. Julius Aroni, in his valuable compilation, *Futures* (New Orleans, 1882), points out that the doctrine that an executory contract for the sale and future delivery of goods does not become a wager by reason of the seller not having the goods in his possession when entering into the contract, was not questioned in England until 1822, when Lord Tenterden, in *Lorymer* v. *White*, 1 B. & C. 1, said that the practice of making such contracts was not to be encouraged. Later, at *nisi prius*, in *Bryan* v. *Lewis*, 1 Ry. & Moo. 386, he ruled that, if one contracts for the sale and future delivery of goods and neither has them at the time nor has contracted for their purchase nor has any reasonable expectation of receiving them, but means to go into the market

It must be added that repeated efforts have been made by State legislatures to stop trading in futures,* the laws of Illinois being, perhaps, the most interesting and instructive example of this kind of legislation. But it is too much to expect that want of success will prevent the repetition of these efforts.

The most important, because the most necessary, commodity traded in is the chief food staple of civilized communities, wheat. A broad view of the equities of trade in this line must place special emphasis on the need for all natural or artificial aids or devices tending to cheapen the cost of flour to the consumer. When society in leading wheat-consuming countries was more primitive than it now is; when general distribution, in some instances over a series of years, was not equal to home requirements; when the farmer carried his grain to the banks of the nearest river to find the miller who met the local demand for flour and shipped a surplus to the neighboring town: — in short, when there was little, if any, need for large stocks of wheat or for "centres of distribution," as we now understand the term, then it was that Produce Exchanges and Boards of Trade were unknown, and the existing form of future contracts in grain had not made its appearance.

But with increase of population, changes in currents of trade, exhaustion of soils, the rise of competitive industries, the enormous reduction of the cost of transportation, and the cultivation of new and fertile areas of soil, certain countries found themselves producing less and less

and buy them for delivery, such a contract is a wager on the market price of the goods. But, after being doubted in one or two cases, this doctrine was set aside in 1839, in the case of *Hibblewhite* v. *McMorine*, 5 Mees. & W. 462, with emphatic language by Barons Parke, Alderson, and Maule. The English doctrine appears, then, to be in harmony with that of the Supreme Court of the United States.

*Ohio, Laws of 1885, p. 254; Illinois, Statutes (Starr and Curtis's ed.), ch. 38, § 170; Arkansas, Statutes (Mansfield's ed., 1884), § 1848; Mississippi, Laws of 1882, ch. 117.

wheat, and others raising far more than they could consume. Thus, the United Kingdom, with 37,000,000 population and a wheat crop of about 75,000,000 bushels per annum, has to import about 145,000,000 bushels for food, besides maintaining stocks. This requires an average of about 12,000,000 bushels of wheat monthly from other lands. Elaborately devised machinery for buying wheat at a moment's notice in the cheapest market, so as not to overstock in the face of possible declines in prices, is now an absolute essential; and, with it, the United Kingdom and other countries successfully wrestle with starvation. Harvest seasons are widely distributed throughout the year. Australia, New Zealand, Chili, and the Argentine Republic (moderate exporters) gather their wheat in January; Egypt, Persia, and Asia Minor, in April; California and Oregon, Kansas and Missouri, in June; Austria-Hungary, Southern Russia, Dakota, Minnesota, Wisconsin, Nebraska, Iowa, Illinois, Indiana, Michigan, Ohio, and Canada, in July; Manitoba, in August, and Northern Russia, in September and October. It is comparatively within recent years that the United States, India, Russia, Australia, and New Zealand have found themselves competitors in supplying the chief importing countries. Surplus yields are now coming into sight in different quarters of the globe at different seasons, and in quantities which vary from year to year with the conditions governing growth. This has developed the great grain markets, like Bremen, Hamburg, Lisbon, Paris, Marseilles, London, Liverpool, Bristol, Glasgow, Odessa and St. Petersburg, Bombay, Kurrachee, and Calcutta, Melbourne and Sydney, New York, Chicago, Cincinnati, St. Louis, Toledo, Philadelphia, Baltimore, and New Orleans.

The grain trade at these cities is responsible for the large and growing task of securing the surplus wheat in exporting countries, transporting it to centres of distribution, grading and storing it, or for placing such a share

of it as may be spared in that portion of the world where it is most needed. In importing countries, they seek to secure wheat in the cheapest markets, without so supplying themselves that a decline may find them overstocked at relatively high prices. Hence the necessity for a most important statistical work,—that of obtaining the latest information concerning crop prospects, harvest returns, qualities, and acreage; stocks of wheat "in sight" at principal points of storage, in the more important grain exporting and importing regions; receipts of grain at interior towns and at shipping ports, stocks exported, stocks afloat and arrived out, and a multitude of other facts tending to fix the actual value of wheat. No small share of this information is that relating to ocean shipping, berth-room and charters available at various ports, the quantity of tonnage on the way thereto, the prospects of return cargoes, and much else influencing rates of ocean freights, and in turn aiding to determine the price of wheat at Liverpool.

This work has to be done, that the world may be fed regularly and cheaply. The machinery necessary to its accomplishment has not been developed in a day; and there is, undoubtedly, still room for growth and for improvement of method or detail. But in view of the intricate problems entering into the work of securing, "carrying," and distributing surplus wheat from various portions of the globe, briefly outlined above, it appears almost a self-evident proposition that the work in hand cannot continue without contracts for future delivery.

Wheat stocks in the United States are from seven to ten days from Liverpool; those in Russia may be conveyed to English ports in from twenty to thirty days; supplies at ports in India are a thirty days' voyage from London; those from the Argentine Republic require ninety days, and from Australia and California about five months. The requirements of English and Scotch millers are for

various qualities; and British importers must continually keep in view the amount of home stocks, the relative wheat harvests and general quality of the yields in exporting countries, the fluctuations of prices abroad and the tendency of prices the world over, in view of generally large or small yields in late years,—not omitting temporary or local influences in any large market, due to weather reports, attempted corners, "cut rates" of transportation, and the like. This leads directly to some distinctly economic uses of the future contract, to emphasize which illustrations from actual transactions will be useful.

A Glasgow miller, in February last, desired to purchase 100,000 bushels of California wheat to grind into flour. The price had been tending upward, due in part, perhaps, to some of the earlier movements of the late wheat corner at San Francisco. He purchased 100,000 bushels of California wheat, engaged freight room, and had it shipped to Glasgow. We will say that the price and freight would make the wheat cost him in Glasgow about $1.07 per bushel. But this wheat would not arrive out until September or October, five months away. By that time, following the Atlantic coast harvests, and with the then probable renewal of arrivals of Russian and Indian wheat, the Glasgow price might or might not be lower than $1.07. In order to insure himself against loss, the Glasgow miller sold 100,000 bushels of wheat for October delivery at New York. The California wheat arrives at Glasgow, but the price of wheat the world over has declined, and the miller finds that it has cost him two or four cents per bushel more than the then ruling price. Under strictly old-fashioned methods, had he not sold 100,000 bushels of October wheat at New York, he would find himself at a decided disadvantage in competition with millers who had not anticipated their wants as he had. But he is not so placed. When he found

the market a few cents lower (the world's chief markets, under normal conditions, being on a parity one with the other), he cabled an order to New York to buy 100,000 bushels for October delivery. At the maturity of his New York speculative contracts, he finds a profit about equal to the loss on his California transaction. So that, notwithstanding he bought 100,000 bushels of wheat at a cost of $1.07 delivered, he in reality gets this wheat at $1.03 to $1.05, owing to his protecting future contracts, the price last given being, we will say, about the ruling quotation at the date of the arrival out of the consignment from San Francisco. Had he found a profit on his California wheat when it arrived,—that is, had the price advanced three to five cents per bushel after the grain left San Francisco,—he would have covered his New York sale at a corresponding loss, thus leaving him situated as before. In this way, English millers and importers of wheat, buying in the United States, Russia, India, Australia, or elsewhere, habitually protect such purchases from fluctuations in price, while in transit (one to five months), by selling futures against them at New York or Chicago and later by covering their contracts. And, when we consider that wheat export purchases made in this country, in Russia, India, and other parts of the world, aggregate some 250,000,000 bushels per annum, and that a very large proportion of the isolated purchases are sold against in New York and Chicago, so that they cost the buyers no more delivered than a decline while in transit may entitle them to, and that all of these sales are in time covered by corresponding purchases of wheat, and that in all cases these "speculative" sales and purchases call for the actual delivery of grain, we may gain some conception of the reasons why future sales make so large a total every year.

But these insuring or protecting sales and purchases of grain are by no means confined to foreigners, who buy

throughout the world and ship to Europe. One may also find ample illustration at home. A New York merchant buys 100,000 bushels of No. 1 hard wheat at Duluth, and orders it shipped by vessel to Buffalo, to go thence to New York by canal. He does this, not because he "wants the wheat for his own use," but as a merchant who believes that the Duluth price and the cost of getting the grain to New York, in view of known or apparent market conditions or of anticipated requirements abroad, will enable him to sell the grain in New York at a profit. With a more primitive view, he would ship this grain, wait until it arrived, look for a purchaser, and, finding one, sell the wheat at the price current at date of arrival, — say, three weeks after he bought it. If at a profit, well and good; but if the price had declined, he would sustain a heavy loss, owing to the size of the shipment. Thus, when the world's requirements are for large available stocks, and the movement of grain must be in large lots, the future contract comes in to protect the handler. The New York merchant, therefore, sells 100,000 No. 2 spring, September delivery, at Chicago, at the date of his Duluth purchase, in August. When the wheat reaches Buffalo, the price has advanced and millers there want some No. 1 hard wheat. He sells them 25,000 bushels, and buys 25,000 bushels of No. 2 spring wheat at Chicago, September delivery, to make good the original quantity purchased. By this time, he has also sold at New York 100,000 bushels, September delivery, to an exporter, and bought 100,000 bushels more at Chicago, relying on the 75,000 bushels on the way and his ability to get 25,000 bushels more, before it is demanded, to keep his engagement. When the 75,000 bushels of No. 1 hard spring wheat reaches New York, the price has declined fractionally; and the owner is enabled, in consequence, to purchase 25,000 bushels at a slightly better price, relatively, than he had paid in Duluth, selling

25,000 bushels coincidently at Chicago for September delivery. He lost on his Duluth purchase and on the 25,000 and 100,000 bushel purchases at Chicago, and on the 25,000 bushel purchase at New York. But he made rather more than corresponding gains through his sale, spot delivery, of 25,000 bushels at Buffalo, including profits on his sales of 225,000 bushels for September delivery at Chicago and at New York, so that he gains on sales of 250,000 bushels and loses on the purchases of 250,000 bushels. The transaction, as a whole, is not very profitable; but millers at home and abroad get wheat at the lowest market price at dates of purchases, the grain is moved from Minnesota elevators to Buffalo and New York and to the Glasgow mill, and the merchant whose sagacity, energy, and foresight led him to aid in the undertaking, even when price conditions were unfavorable, is able to protect himself from excessive loss, without depressing the price to the original holder, who represents the grower, and without having an incentive (not to mention the ability) to unduly advance the price to the consumer, as represented by the miller.

This transaction is simpler than thousands which take place at the leading grain centres throughout the United States almost daily. The quantities of wheat involved may or may not amount to 500,000 bushels; but the total nominal transactions, those which may take place while the grain is in transit, and the protecting sales (which always amount to double the quantity first purchased) may be three or twenty times the actual quantity on which they are based. Here, too, one may find an economic purpose in the collection and grading and maintaining in good condition, by means of weighers and inspectors at the chief interior and seaboard cities, of large stocks of wheat,—in addition to the incentive which comes from a desire to hold it in readiness to take advantage of a demand at home and abroad.

Considerations such as these naturally raise the question as to the proportion of sales of cash wheat and of wheat on future contracts. While official circulars of the grain exchanges at the principal Eastern and Western wheat markets give a daily record of sales of wheat, spot and future delivery, it may be fairly questioned if any of them succeeds in reporting all of such sales. Official reporters on the exchanges, note-books in hand, call on the members of the boards while on the floors, daily, with requests for the amount and character of sales made and prices obtained. But complete returns are not always furnished. Furthermore, the statisticians or secretaries of the exchanges, so far as I can learn, do not give in any instance aggregates of cash or future sales, by weeks or by months, so that there is no available report having an official character. So important, however, are records of this kind, indicating, as they probably do when considered over extended periods of time, a fairly constant proportion of the actual totals, that I have been at some pains to go over the official daily circulars of the New York Produce Exchange, to learn what the details mean when collated, added, and classified. Here is the result: —

TOTAL RECORDED SALES OF WHEAT AT THE NEW YORK PRODUCE EXCHANGE.

[ON AND OFF CALLS.*]

BY WEEKS DURING THE FIRST HALF OF 1887.

During Weeks ended	Bushels.	
	Sales, spot.	Sales, futures.
Jan. 8,	1,089,200	25,131,500
" 15,	1,203,200	25.450,000
" 22,	1,082,800	15,030,200
" 29,	900,000	15,488,7 0
Feb. 5,	1,021,000	16,222,000
" 12,	1,368,000	33,316,000
" 19,	2,044,000	36,404,000
" 26,	1,855,500	33,856,000
March 5,	1,792,580	28,119,420
" 12,	1,699,080	48,923,920
" 19,	1,331,000	44,174,000
" 26,	1,602,000	21,480,000
April 2,	899,000	34.561,000
" 9,	875,000	23,970,500
" 16,	1,227,000	39.383,000
" 23,	2,046,000	36,143,000
" 30,	2,097,000	48,627,000
May 7,	2,441,000	63,376,000
" 14,	3,047,000	40,004,500
" 21,	2,549.500	24,937,000
" 28,	3,356,500	23,890,000
June 4,	2,030 000	20,896,000
" 11,	1,434 000	23,553,000
" 18,	4,521,000	84,945,000
" 25,	3,370,000	41,474,000
July 2,	1,955,000	18,238,000
Totals,	48,836,360	867,594,740

The arrangement of the totals by weeks indicates the average fluctuations in the volume of transactions for both spot and future delivery, during a period with the characteristics of which we are all more or less familiar. The

* The "call" is a daily formal gathering of the members of the board, where each staple in which there are regularly established dealings is officially "called" in a specified order and a record is kept of the prices thus fixed and the parties to the transaction, the sales being made by auction to the highest bidder. Transactions here are formal as opposed to the informality of dealings carried on in the wheat-pit. It is on call, also, that trades are closed out by buying in or selling out under the rule, after complaint to the grain committee of commodities defaulted on, under contract. In this way, settlements of the contracts of failing traders are matters of record. The call also enables banks and others lending money on grain as a security to know, day by day, what are the officially established prices.

total sales of cash wheat (spot delivery) during the six months are equal to about twice the receipts at New York during that time, omitting quantities necessary to maintain stocks and local mill requirements. Sales by contract for future delivery at New York within the six months amounted to about thirty-five times the receipts of wheat within that period, and comprise 94¾ per cent. of the total cash and future sales. The future sales as reported are nearly double the total reported harvest of wheat in the United States in 1886, which was 457,000,000 bushels. The totals of cash and future sales at both New York and St. Louis, the leading red winter wheat markets, as given in detail only in official reports of the grain exchanges at those cities, both on and off calls, are found, after careful compilation, to be as follows: —

During first half 1887.	Sales, cash.	Sales, futures.
At New York, bushels, ...	48,836,000	867,594,000
At St. Louis, "	5,675,000	134,720,000
Total sales, bushels, ...	54,511,000	1,002,314,000

It is undoubtedly well within the limits of probability to assert that future sales of wheat at St. Louis, Chicago, and Toledo, with like trading at leading Atlantic ports, aggregated during the first half of 1887 considerably in excess of 2,000,000,000 bushels of wheat; in other words, that they more than equalled the total production of wheat in the world in 1886.*

There is, however, a class of men trading in futures in addition to those already outlined. There are members of Boards of Trade and Produce Exchanges who

*I know of no other report of aggregates of sales of wheat futures over a considerable period of time, and have sought to compile this from insufficient data, with the intention of making a statement as to the probable situation, whether the result on the surface appear to the advantage of those most interested or not.

sell and buy wheat with no intention of being connected with the work of moving or marketing the crops, —"speculators pure and simple." At times, a group of them may sell futures furiously, merely for the purpose of depressing prices. Should buyers be scarce, this onslaught would be likely to result in prices going off, when the sellers might, as they frequently do, cover their short sales at a profit; or the intention may fail absolutely, as is more often the case, unless action is based on the broader conditions of the market, and aided by special information or better insight into the operations of demand and supply in the near future. This may be the beginning and the end of the operator's interest in wheat. But the volume of trading in futures is not made up of transactions of this character. When it is recalled how the interior wheat buyer, the city grain merchant, the miller, the exporter, and the foreign importer or miller are all engaged daily in securing and moving or selling lots of wheat, varying from 8,000 to 500,000 and even more bushels, and that purchases of parcels of spot grain to be moved are protected by sales of futures, which have to be covered later by purchases, it is easy to see where the bulk of trading in futures comes from; and there is also, in the estimation of the writer, a reasonable and proper cause for operations of this nature.

Still, it is urged—as, for example, by a San Francisco journal—that trading in futures furnishes the opportunity "and a temptation" that "few care to resist to get up a corner on the market, and, as in the present instance" (June, 1887), cause "universal embarrassment and widespread ruin and disaster." Now, it must be remembered that "corners" thrive on special information, or intelligence in the exclusive possession of those having large experience and means: whereas, the growing tendency of the present system of trading is towards the collection and dissemination of better and more complete intelli-

gence regarding production, stocks, transportation, and consumption of the product. Corners in food-stuffs were formerly far more successful than of late years.

The meaning of an attempted corner is that the would-be cornerers believe that the probable supply will not be equal to the expected demand, together with requirements for maintaining what are denominated minimum stocks on hand. The past eight months are strewn with the wrecks of attempted corners in cotton at Galveston, New York, and Liverpool, and wheat at San Francisco and Chicago. Confining attention to those in wheat, it may be premised that the real — that is, the statistical — basis of the San Francisco and Chicago attempts to corner wheat was, on the face of it, sufficient to indicate probable success. English and French stocks were lower than they had been for years. The government Agricultural Bureau reported a crop of 457,000,000 bushels of wheat (both coasts) in 1886; and various investigations of "invisible" wheat stocks in the United States on July 1, 1886 (stocks of wheat in and out of farmers' hands, not in sight at specified points of accumulation), indicated that our visible and invisible wheat supplies a year ago amounted to about 75,000,000 or 80,000,000 bushels. The calculation of probable wants ran about as follows:

	Bushels.
Crop of wheat, 1886, ...	457,000,000
Wanted at home, to July 1, 1887, for food and seed, etc.,	335,000,000
Apparent probable supply available for export, . . .	122,000,000

or 4,000,000 bushels less than the annual average exports since 1881. This, in the face of low stocks abroad, the growth of population and the decline in the average annual export price of wheat in the United States from 106.6 cents per bushel in the year ending June 30, 1884, to an average of 87 cents per bushel in the three years following, was believed (as subsequently proved to be

true) to point to excessive takings for export during the year ending June 30, 1887. To supply such a demand, the supposed reserves would have to be depleted. Hence, the notion of the practicability of a corner in the late months of the last cereal year.

Simplifying the operations of those who conducted the cornering operations, we find that they went into the market in the cities named in the earlier months of the year, and bought all the June wheat that they could induce members of the exchanges to contract to deliver to them; that is, a regiment of San Francisco speculators, as well as thousands of farmers and others, contracted to deliver so many thousand bushels of wheat during June. In Chicago, hundreds of traders, and others there and throughout the country, notably the large millers of the Northwest,* sold likewise for future delivery to the "clique" at Chicago. The price of wheat advanced at Chicago and at San Francisco, and, as inevitable, though to a less degree, throughout the world's markets; that is, the price of the cornered future advanced, as that was in demand. I have not heard those who sold these millions of bushels of wheat called cornerers nor gamblers, nor are they generally regarded as having helped a corner. Yet they sold what they did not possess, expecting to be able to obtain it in time to make a good delivery. Many millions of bushels of wheat were sold (at Chicago) by those who had wheat in elevators in Minnesota, held largely for milling purposes. This they sold against in Chicago, and shipped the wheat to meet the contracts as rapidly as they could get cars to carry it. In fact, every "short" expected to have to make good his contracts to deliver wheat.

Never was there a better illustration of whether future contracts are based on actual deliveries or not! Chicago warehouses and elevators were bursting with grain. Side-tracks for miles without the city were blocked with cars

* As publicly announced, and not denied.

of grain, which it was impossible to unload at times for want of storage facilities. If this corner was purely a gamble on the mere price of the article, it would appear that there was an unnecessary outcry at Chicago over the lack of room to store the grain shipped there. And, finally, it was the shorts who "broke" the Chicago and San Francisco corners, by demonstrating that interior supplies were ample for actual requirements.

Of the effect of the cornering operations, even in a case where they failed, some are too obviously mischievous to require comment. The fever of speculation which was generated for the time being, the depressing reaction which followed, and the injury to trade in other lines by the locking up of large sums of money in banks at leading grain centres, are evils universally recognized. No doubt, too, such considerable interests as the California and Chicago milling industries were injured. The price of wheat flour in California was advanced, owing to the rise in the price of wheat, from $5 to $6.30 per barrel; and Minnesota wheat invaded the Pacific Coast, and sold there at $5 per barrel. Chicago millers were similarly troubled, although the public there, too, were relieved from anxiety. Trade, moreover, between San Francisco and the United Kingdom was disturbed, owing to the advance in ocean freight rates, caused by the fear of not securing return cargoes of wheat, owing to cornering operations.

On the other hand, it is to be said that the confident assertions as to our exports of wheat being cut off by an artificially stimulated price are not supported by facts. Shipments of wheat (and flour as wheat) from July 1, 1886, to July 1, last, were the largest since 1879–80 and 1880–81, aggregating nearly 160,000,000 bushels. On August 1, the London *Miller* said, "American wheat shipments to the United Kingdom will be seen to have been heavier in the past month than at any other period

of the cereal year." But this is not merely an after-sight. On May 30, the Chicago *Tribune* reported that "arrangements have been made to ship some 20,000,000 bushels from the Atlantic seaboard during June."

In fact, the alleged rise of wheat and the declamatory talk about "raising the price of bread" were not true, even during the lives of the "cliques." The contract grade at Chicago is No. 2 spring wheat. At New York, from April 1 to July 1, spring wheat patent flour did not vary materially in price, except during the latter half of June, when it ranged a trifle lower. Since the break in the Chicago corner, prices of wheat have been "lower than ever before" the world over, which must result to the distinct advantage of the miller, and hence of the consumer, in all directions. The Buffalo *Milling World*, writing of the Minneapolis millers and the collapse of the Chicago wheat corner, says: —

> Prices fell about 10 cents, and it is estimated that Minneapolis millers took from 1,500,000 to 2,000,000 bushels at a decline of about 8 cents a bushel. This means a difference of nearly 40 cents a barrel, which, while of course not all profit, makes an appreciable difference in the millers' accounts.

The Chicago *Tribune*, referring to the reaction in prices after the panic at the Chicago Board of Trade, said on July 22: —

> The straight grade of No. 2 Chicago spring wheat sold in this market last Wednesday at twenty-nine shillings per quarter in the harbor at Liverpool, being equal to only 87 cents per bushel, "cost, freight, and insurance." This was the lowest price ever reported.

The London *Millers' Gazette* advances the opinion (in August) that: —

> With regard to the present general position, it is true that prices of foreign wheat, and especially of American wheat, are now more advantageous to the home miller than they have been for a long time past; for red American wheats were perhaps never so cheap, relatively, as they are now.

The truth is that the advance in the price of wheat at Chicago from February to May was not material. During the following six weeks there was a net gain of 11 or 12 cents per bushel, followed by a drop of 26 cents per bushel, after the crash of June 14. At New York, the corresponding gain in price, May to June 14, was about 3 cents per bushel; and the reaction in sympathy with the break at Chicago was about 10 cents per bushel (to July 2) as compared with two and one-half times that amount at the seat of the disturbance. While, therefore, the extra prices paid for grain by speculators — participants in the clique movements at Chicago and San Francisco — were in fact distributed among thousands of merchants and millers and farmers in the West and Northwest and on the Pacific Coast, the price of wheat averaged much lower than it would have been likely to, except for the attempts to corner, which reflects itself in cheaper bread for millions.

It is in the face of such facts as these that the Knights of Labor were counselled by their executive head "to keep their eyes turned towards the produce exchange; and, the moment the grain or produce gambler announces that there is a scarcity in a certain article of food, every member should resolve that until the unhallowed hand of the speculator has been removed not an ounce more than can be avoided will be purchased." Of course, such a boycott as this, if it could be carried into effect, would be a godsend to the speculative operators; for, in order to secure fabulous profits, they would only have to sell wheat "short" *ad lib.*

The outcome of such an experience as we have had with corners this year must be to discourage them seriously. Men may talk of laws against cornering food products in the great exchanges, but there never was and there never is likely to be a law which can prevent one man or set of men from buying that which is regarded as

cheap, to any extent that others may be willing to sell, or to contract to sell, provided the buyer be able to pay for it. Nor, as has been well suggested, could any court convict and punish so severely and promptly as the inexorable laws of trade punish the speculator who trespasses too far on the peace of the community.*

The general business transactions of the world to-day, not only in wheat and corn and oats, but in coffee and sugar, in cotton, in petroleum and tobacco, in iron and steel, woollen and cotton goods, in building of all varieties, and even the dealings of the humblest retail grocer, are found, upon analysis, to be conducted on the basis of future contracts, either expressed or understood. For example, supplies of sugar and coffee are contracted from the importer or jobber by interior houses on the basis of a future delivery; and the importer in selling sells a future, and often goes "short" in so doing, relying on his ability to buy the product in time to ship it. And when many retail grocers throughout the country refused to buy stocks of coffee early in 1886, believing that the advance in price was too rapid and could not be sustained, they practically went short of the coffee market, to their cost; for they all, sooner or later, had to buy at much higher prices.

The great grain markets of the country have systematized the universal practice, and surrounded themselves with safeguards to permit the more efficient and satisfac-

*The New York *Evening Post* in June last said on this subject: "Yesterday, a clique of wheat cornerers at Chicago were fined more than a million dollars for this offence, and the fine was instantly paid. No public expense was incurred in prosecuting the offenders. The State's Attorney was not called upon to render any service. There was no grand jury to find an indictment, and no petit jury to try it, no struggle between the prosecution and the defence over the selection of jurors, no attempt at embracery, no exceptions to the rulings of the court, no appeal to the higher courts, and no petition for executive clemency. It need hardly be said that no court or jury would ever impose a fine of a million dollars in such a case, and that no sheriff would ever be able to collect it if it were imposed. . . . The million dollar fine was not only col-

tory marketing and distribution of the world's crops of wheat. It has been seen that the greater share of transactions in futures, which have been aptly termed an adaptation of probable supplies to anticipated requirements, consist of protecting purchases and sales, to insure against loss on wheat in transit, owing to fluctuations in prices during the time occupied by shipment.*

The system of dealing in wheat by means of future contracts may therefore be declared to result in positive and direct economic advantages. It furnishes a ready market to the producer, who can no longer carry necessary surplus stocks. It affords a means of transporting wheat from far distant producing countries at a fixed price delivered, at a minimum of loss through fluctuations of prices while in transit. It enables the trade to collect enormous stocks of wheat and carry them over from seasons of plenty to seasons of scarcity, without loss to producers, millers, or consumers (when considered over considerable periods of time), as may be shown by the records of the decline in prices of wheat and of flour,

lected in a summary manner from the wheat cornerers, but it was collected from each of them in the right proportions, and from the absentees as well as those present. If there were any participants residing in London or Liverpool, they, too, paid their proper share. . . . Judgment, execution, and punishment all came instantaneously. There was a flash of lightning and a clap of thunder; and then the sun came out, and everything was serene again. The world is going on as before, and is just as rich as before. There has been a transfer of capital here and there. It has generally been from the pockets of the speculating class to those of the producing class."

* Well-informed and experienced members of the grain trade have the impression that this class of dealings in futures constitutes by far the greater share, in the absence of special temporary disturbing influences. If 100,000,000 bushels of actual wheat were moved in the United States east of the Rocky Mountains, between January 1 and July 1, last,— a low estimate,— and 150,000,000 from exporting countries, we may regard 250,000,000 bushels as an approximate total of the quantity against which double that amount of protecting sales were probably made at New York and Chicago during the period specified. This estimate allows for no intermediate sales and purchases, which at the lowest estimate are likely to treble the grand total, thus accounting for at least three-fifths of the probable aggregate of trades in futures at New York, Chicago, and St. Louis in the first half of the current year.

together with those of the growth of heavy interior and seaboard stocks awaiting the first telegraphic demand. The tendency is also to equalize prices the world over, as a casual inspection of grain exchange circulars will attest, and to minimize fluctuations by keeping the markets, and through them the world at large, abreast of developments as to crops, the yield, quality, stocks on hand or in transit, and the course of prices at all important centres.

That in the long run these results inure to the advantage of the consumer, and that like any other improvement in production or distribution the elaborate organization of trade cheapens the product for him, admits of no question. This gain has to be accepted, no doubt, like most others, subject to the risk (probably a diminishing risk) of abuse. But an impartial examination and sober judgment of the facts, I believe, can lead to no other conclusion than that, on the whole, the community, after all, purchases at a cheap rate the advantages resulting to it from the dealings in futures.

ALBERT C. STEVENS.